



Developing Effective Safety Training

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Course Objectives:

- Introduction -
- Learning Defined
- Why, Who & What to Train
- Exploring the Adult Learning Process
- Developing Training Content
- Presentation Skills
- Conclusion



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Learning ?



The cognitive process of acquiring skill or knowledge

Learning is the acquisition and development of memories and behaviors, including skills, knowledge, understanding, values, and wisdom. It is the **product of experience and the goal of education**.

The **action** of the verb to learn; Accumulated knowledge

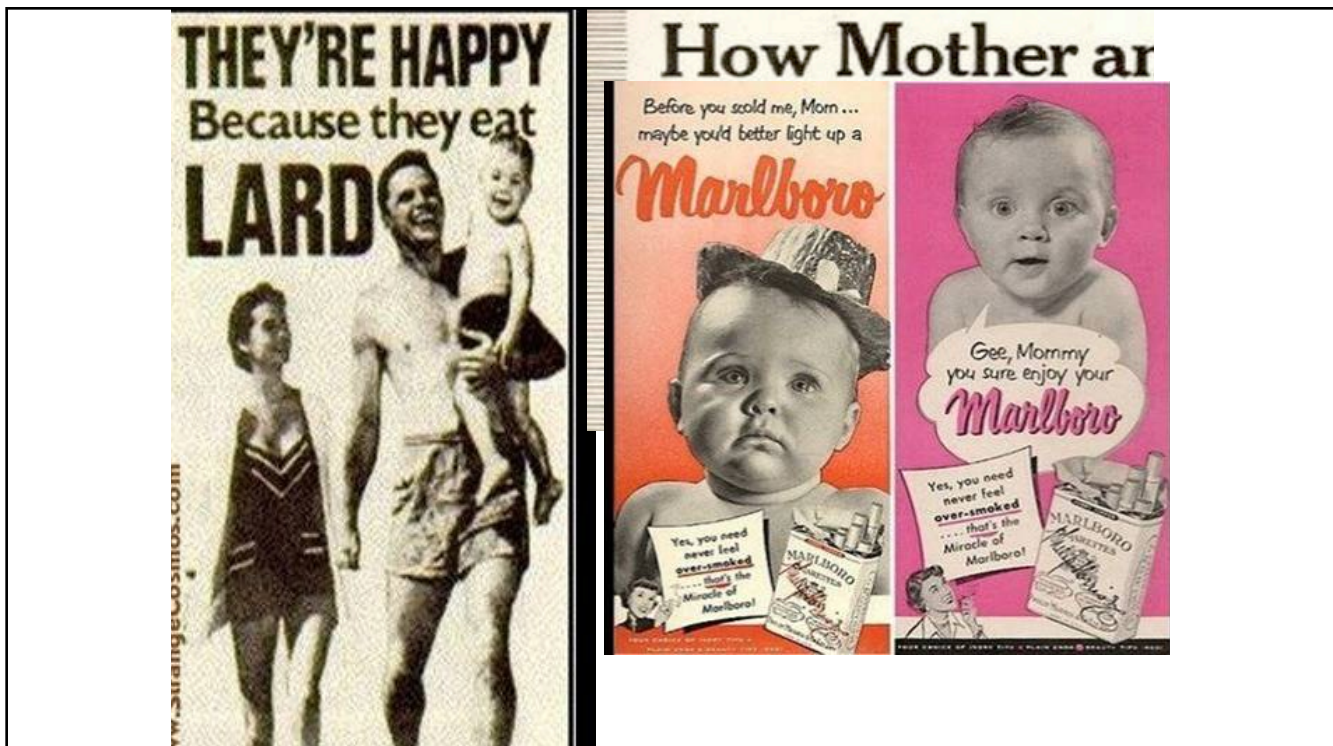
The process by which weights and biases are adjusted to achieve some desired network behavior.

The **process** of acquiring knowledge, attitudes, or skills from study, instruction, or experience. Source: Miller & Findlay 1996,

Education program whereby students may complete all or part of an **educational program** in a geographical location apart from the institution



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Miscommunication

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Why Do We Train?

Good Business Practice

- integrates into business plan
- 4 to 6 dollar return on investment
- ethical

Legal Requirement

- OSHA Law
- Other related liabilities



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Who Do We Train?

Targeted Training

JHA, JSA, HAZOP, FMEA, Fault Tree
New Employee, Young Employee

Blanket Training



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What to Train?

Job Hazard Analysis

See Handout

Tabletop Exercise

Injury Statistics

OSHA Required Training

Benchmark - "Standards of Care"



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Job Hazard Analysis

| | | | | | | | | |
|----------------------|--|--|--|--|--------------------|--|--|--|
| Operation: | | | | | | | | |
| Date: | | | | | Supervisor: | | | |
| Participants: | | | | | | | | |

| Step/Hazard | Probability Rating | Severity Rating | Risk Rating | Required Additional Controls | Who | When | Residual Concerns/Goals |
|-------------|--------------------|-----------------|-------------|------------------------------|-----|------|-------------------------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |



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ACTIVE LEARNING

By L. Dee Fink

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Many college teachers today want to move past passive learning to active learning, to find better ways of engaging students in the learning process. But many teachers feel a need for help in imagining what to do, in or out of class, that would constitute a meaningful set of active learning activities.

The model below offers a way of conceptualizing the learning process in a way that may assist teachers in identifying meaningful forms of active learning.

A Model of Active LearningEXPERIENCE OF:DIALOGUE WITH:

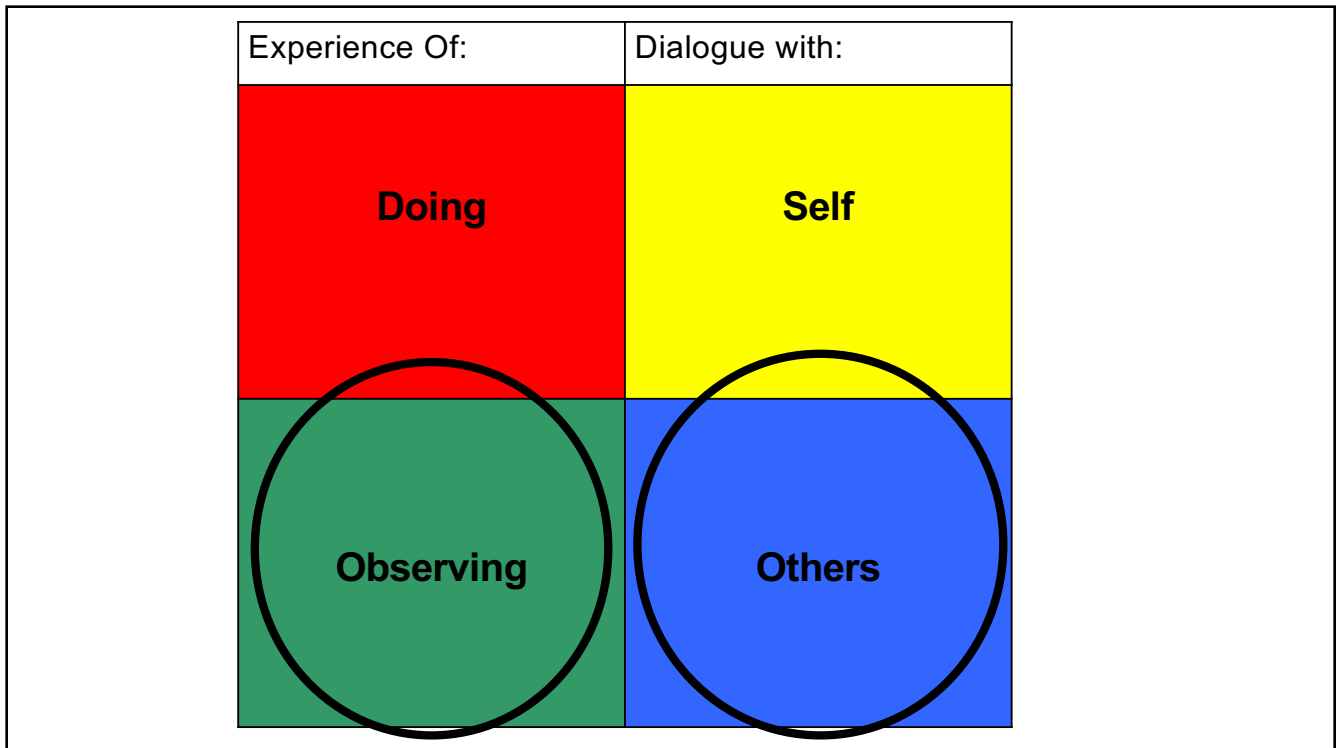
DOING

SELF

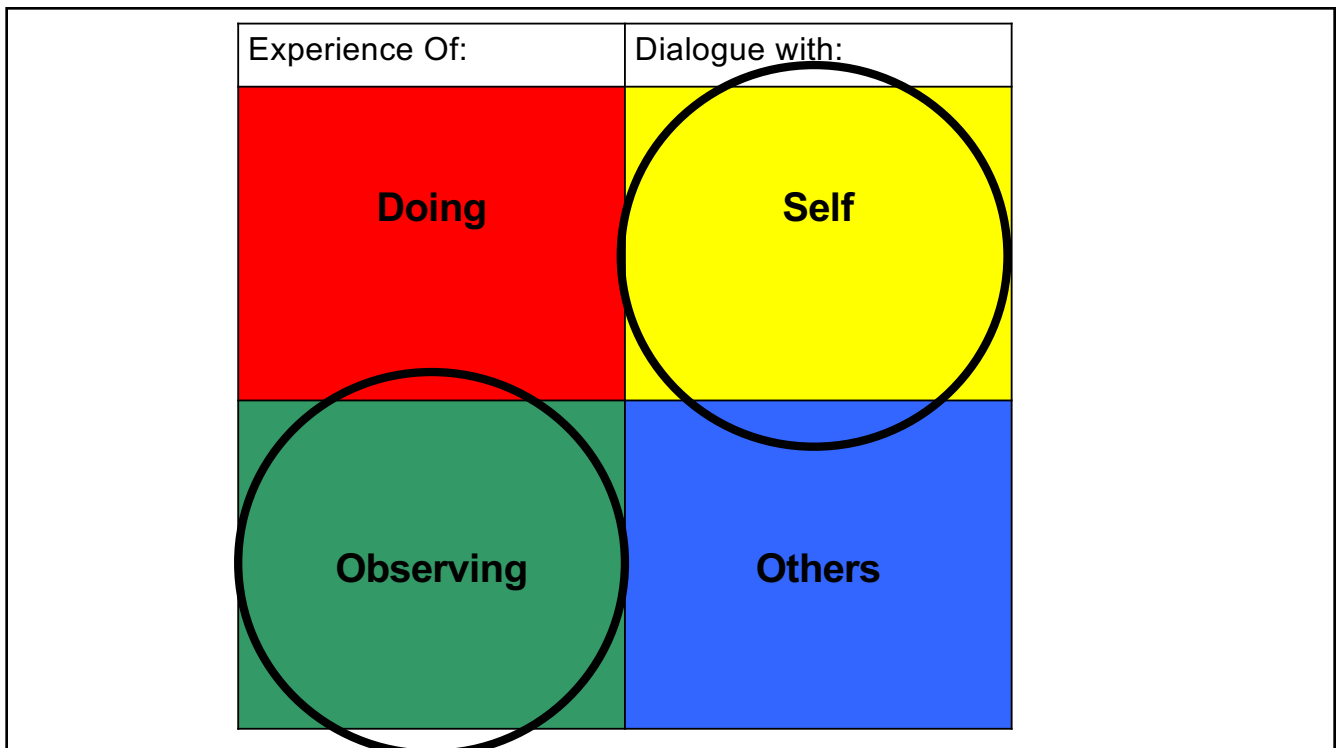
OBSERVING

OTHERS

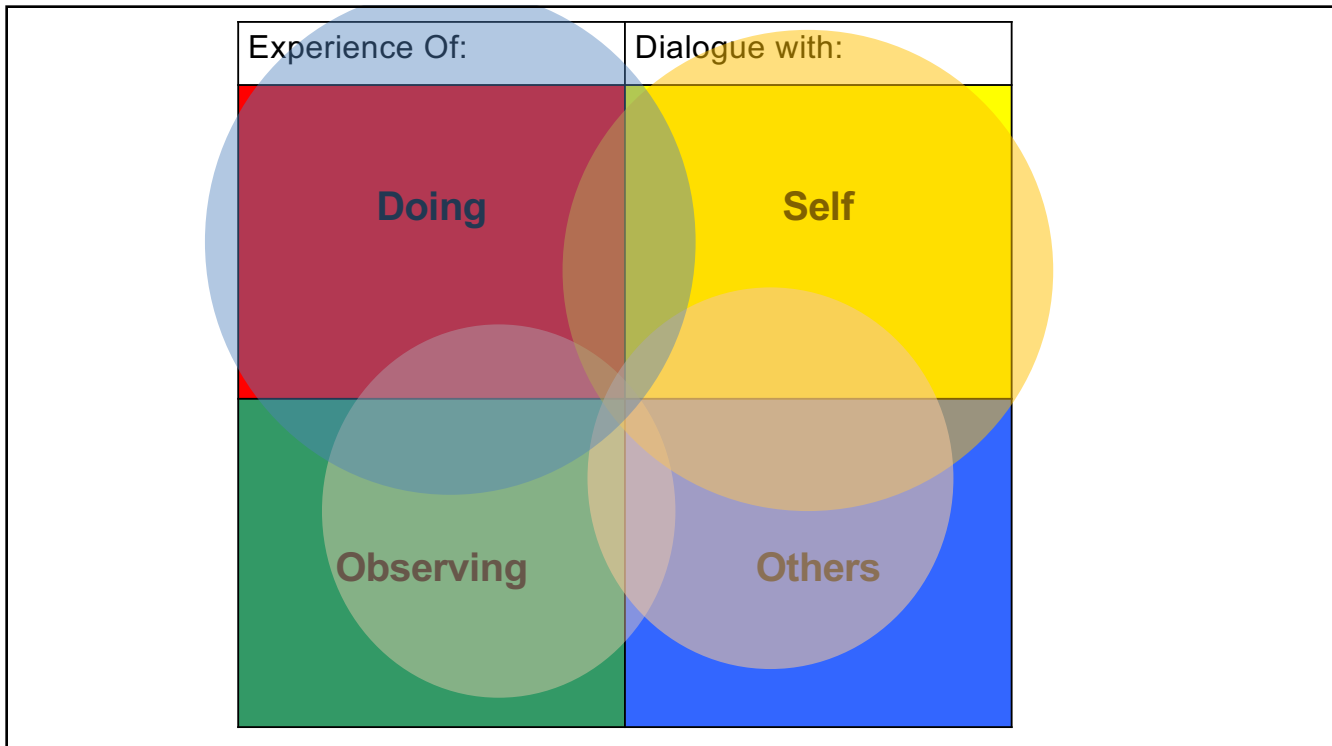
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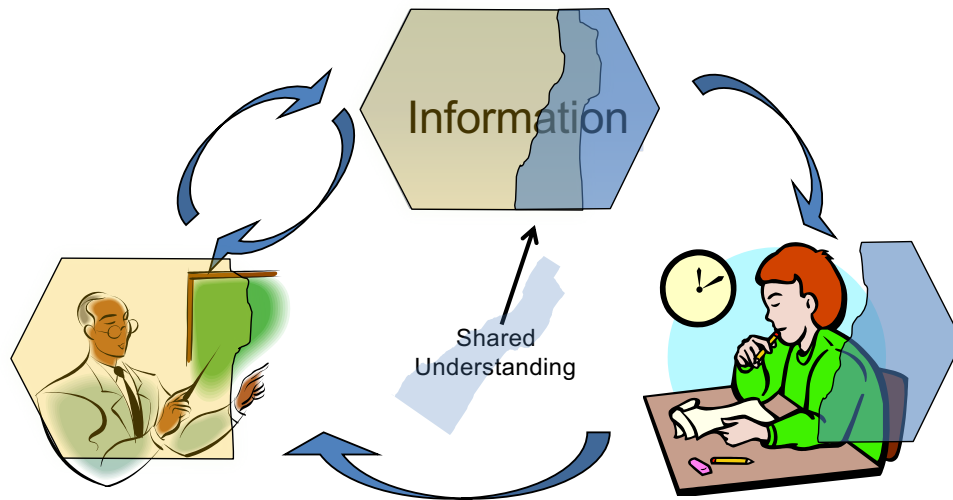
Learning Process

Gaining Attention
 Informing Learner of the Objective
 Stimulating Recall of Prior Learning
 Presenting the Stimulus
 Providing Learning Guidance
 Eliciting Performance
 Providing Feedback
 Assessing Performance
 Enhancing Retention and Transfer



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Learning Process



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STOP !!!!!

Talk to your neighbor

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Adult Learners:

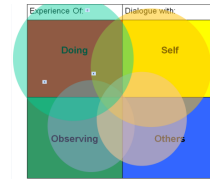
Adult Attention Span?

Maximum Attention Span?

People do not listen !!!

How do we transfer information?

5 senses - input information
integration into "schema"



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Training Adults

What's in it for me?

How can I use this?

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Selective Perception

| | |
|------------------|-----|
| Active Listening | 20% |
| Reminiscing | 40% |
| Looking Ahead | 20% |
| Other Thoughts | 20% |



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Recall

| | Delivery of Information & Percent Recall | |
|-------------------|--|--------------|
| | After 3 Hours | After 3 Days |
| Telling Alone | 70 % | 10 % |
| Showing Alone | 72 % | 35 % |
| Showing & Telling | 85 % | 65 % |

[- Cornwell Carlson, *The Kansas City Times* as cited by Paul R. Timm]

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Content:



Reflect Course Objectives

Be Correct

Be Useful (handouts, reference)

Concise & User Friendly

Most courses are not advanced topics.

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How to Train?

Jean Piaget - "Information must fit"

cultural barriers to learning

Appeal to the learning process

adult attention span

cultural need for high impact information

Does not have to be complicated

Presentation Skills

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GHS –
Global Harmonization System



GHS Task Force



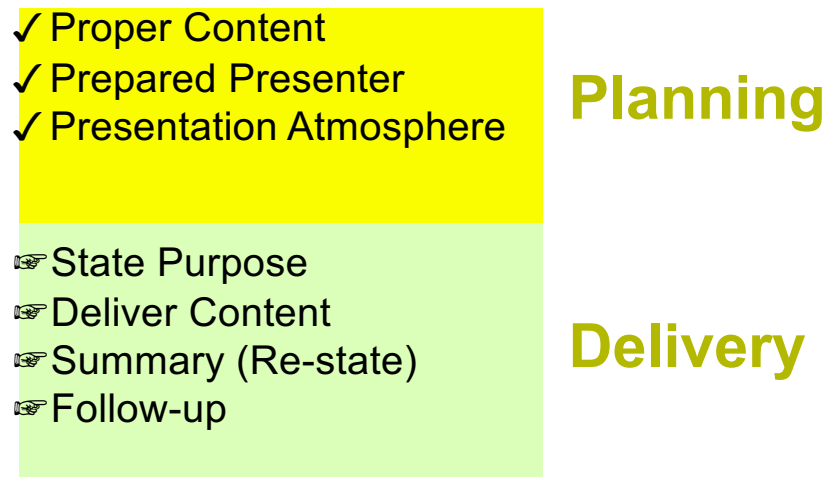
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Elements of Successful Training:



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Elements of Successful Training:



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Safety Training

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Techniques

Speak clearly & loud enough to be heard

Speak slowly

Avoid distracting sayings/habits

Introduction

Outline

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PowerPoint

When to use?

Do not write out every single word you intend to speak throughout the class. This is not effective for those you teach.

Appropriate graphics

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Presentation Skills:



Physical Appearance

Dress

Body Posture

Verbal Cues (volume)

Position to Audience

Hand Gestures

Response to ??????s

Great Teacher = Great Listener

Visual, Verbal, Written,
Action

TOO MUCH - VISUAL

Transitions for change

Introduction

Apologetic

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Elements of Successful Training:

Body movement
Physical appearance
Stature/Position
Room
Handouts
Video/Audio
Audience



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Stretch Break

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Why Your Class Isn't Listening

Literally can't hear you

Don't understand

No "why"

Misunderstood hazard

Too much joking

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Why Your Class Isn't Listening

Questions & concerns are ignored

Message doesn't apply

No test of comprehension

Too much talking

Roadblocks



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Techniques

Change up every 20 min

Emphasize principles

Get participation

Facilitate discussion

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Techniques

Pause

Review info

Talk over topic after

39

Ideas

Write thoughts before meeting with group

Small groups

Have class take notes

Observe actions

Hands on activities



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Using Adults

Knowledge share

Problem solving activities

Encourage participation

Relate info to job

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Using Adults

Stay on time

Positive environment

Respect differences



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Story of a Bucket

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Ideas

Spot the Hazard

Crossword

Music

Hangman

Mnemonics

Object lessons

Smells

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Training Games

Who's line is it anyway – role play

Clue – who done it?

Family Feud

Musical Hot Potato

Hollywood Squares/Tic Tac Toe

Competition – questions for each team

Brainstorm

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Evaluation

Continuous improvement for training

Self - Evaluation (video tape)

Participant Evaluation

Testing & Follow-up

Student Demonstration - “competency”

Third Party Evaluation

Benchmarking

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Training Exercise

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Conclusion

Learning Defined

Why, Who & What to Train

Exploring the Adult Learning
Process

Developing Training Content

Presentation Skills

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